

WHAT IS CLAIMED IS:

1. A receptacle assembly, comprising:

a plurality of guide frames, each of said guide frames having top, bottom and side walls joined to form an interior cavity configured to receive an electrical module, each of said plurality of guide frames having a heat sink opening extending through one of said top, bottom and side walls; and

a heat sink mounted over each of said guide frames and extending through a respective one of said heat sink openings, each respective heat sink having an engagement surface located proximate said interior cavity of said respective guide frame, said engagement surface of each heat sink being configured to physically contact a respective module when installed in said respective interior cavity; and

a heat sink clip spanning said plurality of guide frames.

2. The receptacle assembly of claim 1 wherein said heat sink clip comprises retention beams extending over said plurality of guide frames, said assembly further comprising interposer spring elements actuated by said retention beams.

3. The receptacle assembly of claim 1, further comprising a plurality of spring elements secured over a respective one of said plurality of heat sinks, each said spring element contacting a respective heat sink and exerting a clamping force thereupon.

4. The receptacle assembly of claim 1 wherein said clip comprises side rails that snap over said side walls of said plurality of guide frames, said side rails being joined by retention beams, each of said retention beams engaging a plurality of interposer spring members that extend over, and flexibly engage, said heat sinks of each respective guide frame.

5. The receptacle assembly of claim 1, wherein said engagement surface of each heat sink rests within a respective one of said interior cavities of said guide frames at a level that interferes with an installation path of the module, each said heat sink being movable outward by the module when the module is installed to provide an abutting interface between the heat sink and module.

6. The receptacle assembly of claim 1, wherein said engagement surface of each of said heat sinks is flat and smooth to slide along a mating surface of the module when installed.

7. The receptacle assembly of claim 1 wherein said plurality of guide frames comprises four guide frames.

8. A transceiver receptacle assembly, comprising:

a plurality of guide frames aligned with one another, each said guide frame having top, bottom and side walls joined to form an interior cavity configured to receive a transceiver, said top wall having a heat sink opening therethrough; and

a plurality of heat sinks, each of said heat sink mounted over each respective heat sink opening of said guide frames, each said heat sink having an engagement surface located proximate said interior cavity of each respective guide frame, said engagement surface of said heat sink being configured to physically contact the transceiver when installed in said interior cavity; and

a plurality of interposer spring elements, each of said interposer spring elements exerting a normal force on a respective one of said plurality of heat sinks.

9. The transceiver receptacle assembly of claim 8, further comprising a clip extending over said plurality of interposer spring elements, said spring elements flexing to permit said heat sink to move outward away from said guide frame when the

transceiver is inserted, said clip having side rails that snap over said side walls of said plurality of guide frame.

10. The receptacle assembly of claim 8 further comprising a clip comprising retention beams spanning said plurality of interposer spring elements, each of said retention beams flexing said plurality of interposer spring elements to flexibly engage said heat sinks of each respective guide frame.

11. The receptacle assembly of claim 8, wherein said engagement surface of each of said heat sinks is flat and smooth to slide along a mating surface of the transceiver when installed.

12. The receptacle assembly of claim 8 wherein said plurality of guide frames comprises four guide frames.

13. An electronic transceiver assembly, comprising:

a plurality of guide frames, each of said guide frames having top, bottom and side walls joined to form an interior cavity and having a heat sink opening extending through one of said top, bottom and side walls;

a plurality of transceivers, each respective transceiver configured to be received in a respective one of said guide frames;

a plurality of heat sinks, each respective heat sink mounted over a respective one of said guide frames and extending through a respective one of said heat sink openings, each respective heat sink having an engagement surface located proximate said interior cavity of said respective guide frame, said engagement surface of each heat sink being configured to physically contact a respective one of said transceivers when installed in said respective interior cavity; and

a heat sink clip spanning said plurality of guide frames.

14. The receptacle assembly of claim 13 wherein said heat sink clip comprises retention beams extending over said plurality of guide frames, said assembly further comprising interposer spring elements actuated by said retention beams.

15. The receptacle assembly of claim 13, further comprising a plurality of spring elements secured over a respective one of said plurality of heat sinks, said spring element contacting each of said respective heat sinks and exerting a clamping force thereupon.

16. The receptacle assembly of claim 13 wherein said clip comprises side rails that snap over said side walls of said plurality of guide frames, said side rails being joined by retention beams, each of said retention beams engaging a plurality of interposer spring members that extend over, and flexibly engage, said heat sinks of each respective guide frame.

17. The receptacle assembly of claim 13, wherein said engagement surface of each heat sink rests within a respective one of said interior cavities of said guide frames at a level that interferes with an installation path of the respective transceiver, each said heat sink being movable outward by the respective transceiver when the respective transceiver is installed to provide an abutting interface between the respective heat sink and the respective transceiver.

18. The receptacle assembly of claim 13, wherein said engagement surface of each of said heat sinks is flat and smooth to slide along a mating surface of the respective transceiver when installed.

19. The receptacle assembly of claim 13, wherein each of said transceiver modules is configured to transmit data signals at rates up to 10 Gbs.

20. The receptacle assembly of claim 13 wherein said plurality of guide frames comprises four guide frames.